

# Standards of Public Land Health

## Evaluation of 64033 BARN DRAW Allotment

### [ 12/06/2006 ]

The Roswell Field Office conducted (RHA) Rangeland Health Assessments at 3 study sites within Barn Draw, allotment #64033. These assessments evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of these field assessments. A summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64033-BERT-E153	X			X			N/A		
64033-DRAW-E152	X	*		X	*		N/A		
64033-WEST-E154	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Barn Draw, allotment #64033. Ten of these assessed soil site stability; 11 hydrologic function; and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on 3 trend plot locations within this allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office, which include some or all of the following: ground cover, vegetative cover and composition, production, frequency, and ecological condition. These collections which were initiated in the late 1970's/early 1980's are scheduled and conducted approximately every 5 years. The Barn Draw Allotment is approximately 23,053 acres in size. Much of this allotment is private land with some state sections. The western portion of the allotment contains public land that comprises about 1/3 of the allotment. Pasture divisions are not available through GIS data. The BLM parts of the allotment are mostly comprised of Shallow SD-3 or Shallow CP-2 ecosites, although, GIS data shows most of the area as Limestone Hills SD-3. The BLM terrain is mostly rocky and hilly and is gently sloping to moderately sloping (5-30% slope). Elevation within the BLM portion of this allotment ranges from approximately 3950 feet to 4300 feet. This area consists of a series of ridges and valleys that drain to the east. Valley bottoms are likely Loamy SD-3 ecosites that are not represented by the study sites on this allotment. These narrow valley bottoms and the relatively flat Loamy areas to the east (mostly private land) appear to receive the bulk of the grazing and show significant departures from the Loamy SD-3 ESD. The narrow valley bottoms on BLM land are occasionally heavily infested with mesquite. Often, the dominant grass in these areas is burro grass. Roads following the drainages are eroded with active gully formation. Roads (particularly through loamy sites and east of BLM land) are

typically lined with musk thistle. Invasive plants (especially mesquite and musk thistle) are becoming a serious problem on this allotment.

The upland BLM areas represented by the study sites are stable and typically well vegetated with relatively good species diversity. All sites are experiencing an increase in shrub cover. All sites are experiencing a shift in grass composition. Black grama was well represented, but in all cases, threeawns and Tridens were becoming the dominant grasses. No grazing use was observed on any of the study sites; however, past grazing use is obvious within and near the drainages.

The following discussion is a site by site evaluation.

Site 64033-WEST-E154 was visited on May 22, 2007. This study site is within a Shallow SD-3 ecosite. The site is rocky. Slopes range from approximately 4 - 15%. A Loamy drainage bottom is near this site. Soil is relatively stable at this site. All soil indicators rated "slight to moderate" or "none to slight". There was minimal evidence of soil movement or loss. Hydrologic function was near what is expected for the site, but there is an increase in shrubs (mesquite and catclaw (ACGR) and snakeweed). This increase was not judged to be affecting runoff and infiltration at this time. Herbaceous cover was somewhat higher than expected for the ecosite.

Most indicators assessing biotic integrity for the site rated "slight to moderate" or "none to slight". F/S groups rated "moderate" due to the increase in shrubs and the change in the grass community. While there is still good diversity of grasses, the area has shifted to a threeawn / Tridens, grass / shrub mix. Invasive Plants rated "moderate" primarily due to the encroachment of mesquite, but cholla are widely scattered throughout the site, and there is an apparent increase in "increaser" shrubs such as catclaw (ACGR), snakeweed, and prickly pear. Production for the site was high due to good, late summer rains in 2006. This site provides good habitat for mule deer.

Site 64033-BERT-E153 was visited on May 22, 2007. This study site is within a Shallow SD-3 ecosite. The site is very rocky. Slopes range from approximately 3 - 15%. A Loamy drainage bottom is near this site. Soils are relatively stable at this site. All soil indicators rated "slight to moderate" or "none to slight". There was some evidence of soil movement or loss but this was more evident near the drainage. Rills and gullies are rare except for the main drainage with the access road, where active erosion is occurring.

Hydrologic function was rated similarly. Herbaceous ground cover was as expected for the site. There is an increase in shrubs (i.e. catclaw acacia and snakeweed), but not enough to affect runoff and infiltration at this time.

All indicators assessing biotic integrity for the site rated "slight to moderate" or "none to slight". There is an increase in shrub cover and a shift in the composition of grasses. The area has transitioned to a threeawn / Tridens, grass / shrub mix. Production was relatively high (60 - 80% of potential). Invasive plants rated "slight to moderate" due to mesquite being widely scattered. Musk thistle (*Carduus nutans*) was common along the roads leading to the site. The site provides good habitat for mule deer.

Site 64033-DRAW-E152 was visited on May 22, 2007. This study site is within a Shallow CP-2 ecosite. The site is very rocky. Slopes range from approximately 5 - 30%. A Loamy drainage bottom is near this site. Soils are relatively stable at this site. All soil indicators rated "slight to moderate" or "none to slight". There was some evidence of soil movement or loss but this was more evident near the drainage. Rills and gullies are rare except for the main drainage with the access road, where active erosion is occurring. Hydrologic function was rated similarly. Herbaceous ground cover was near expected for the site. There is a substantial increase in shrubs (i.e. catclaw acacia and snakeweed). This increase is having a minor effect on runoff and infiltration. This effect is likely to increase as shrubs begin to dominate the site.

Most indicators assessing biotic integrity for the site rated "slight to moderate" or "none to slight". There is an increase in shrub cover (approximately 4 times the amount expected) and a shift in the composition of grasses. The area has transitioned to a threeawn / Tridens, grass / shrub mix. Shrubs are beginning to dominate the site. Production was high (> 80% of potential). Invasive plants rated "moderate" due to mesquite being scattered throughout the site, particularly along the drainage and due to the significant increase in catclaw. Musk thistle (*Carduus nutans*) was common along the roads leading to the site. The site provides good habitat for mule deer

**Recommendations:** Although not specifically assessed through the study sites, the loamy areas along the drainages are showing a greater departure from ecological site conditions. These areas are also being encroached by mesquite. Desirable grasses are greatly reduced in the composition. In addition to the treatment of mesquite, consider changing the timing, duration and intensity of grazing in these areas. Upland areas show much less departure, but treatment of increasing shrubs such as catclaw will prevent these sites from further transitioning to shrub sites.

Active erosion is occurring in several drainages and is mostly associated with old roads. All the roads within this allotment should be evaluated for this condition and corrective measures taken.

The potential for musk thistle to invade BLM lands is great. Musk thistle has become established along most of the roads passing through the state and private lands of this allotment. Recommend a complete inventory with follow-up treatment.

<b>RFOs Upland and Biotic Standard Assessment Summary Worksheet</b>			
<b>SITE 64033-BERT-E153</b>			
Legal Land Desc	SESE 1 0090S 0220E Meridian 23	Acreage	1819
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060005070 SALT		
Observers	BRITTON; DILLEY	Observation Date	05/22/2007
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	ESD	Soil Taxon Name	ECTOR

Texture Class	NM644 CBX-L	Soil Phase	ECTOR-ROC
Texture Modifier	NM644 EXTREMELY COBBLY L		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.55	NOAA Growing Season Precipitation	8.18
NOAA Avg Annual Precipitation	9.73	NOAA Avg Growing Season Precipitation	8.01
Disturbances and Animal Use:	There was no apparent use in the vicinity of the study site, but one bull was observed in the pasture. A road passes through the site that is washed out with parallel routes in places.		

## Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills				X	
Comments:	Rills are associated with the drainage and primarily the drainage with the road.					
S H	Water Flow Patterns				X	
Comments:	Upland areas are stable. Flow patterns are short and stable. The bottom areas near the drainage have much more defined flow patterns.					
S H	Pedestals and/or Terracettes				X	
Comments:	Pedestalling is minimal on the uplands, but more noticeable near the drainage.					
S H	Bare Ground					X
Comments:	Much less than expected. There is lots of surface rock.					
S H	Gullies				X	
Comments:	Drainages are relatively stable except for the drainage with the road.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	There is some displacement particularly closer to the drainages.					
S H B	Soil Surface Resistance to Erosion				X	

Comments:	Soil aggregate stability is good in the upland areas. Site is well armored with rock. Areas near drainages are less resistant.					
S H B	Soil Surface Loss or Degradation				X	
Comments:	There has been some soil loss. Uplands are relatively stable, but less so near the drainages.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:	Herbaceous cover is as expected for the site. Shrub cover may be increasing.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	The site is shifting to a threeawn / tridens grassland. Shrubs may be increasing (GUSA and ACGR). BOER is still well represented.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Slightly higher than expected for the site. Estimated to be 10 - 15%.					
B	Annual Production				X	
Comments:	Estimated to be 60 - 80% of potential. Good late summer rains in 2006.					
B	Invasive Plants				X	
Comments:	Catclaw and snakeweed are higher than expected and are likely increasing. While not on this site, the roads leading to this site (mostly on private land) are infested with musk thistle.					
B	Reproductive Capability of Perennial Plants					X
Comments:	Desirable grasses made seed in 2006.					
S	Physical/Chemical/Biological Crusts				X	
Comments:	Evident throughout, but discontinuous.					
B	Wildlife Habitat					X
Comments:	Satisfactory for mule deer.					
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:	N/A					
B	Special Status Species					X

	Populations					
Comments:	N/A					

### Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	7	3
H	Hydrologic	0	0	0	7	4
B	Biotic	0	0	0	6	7

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil	Soils are stable with little evidence of erosion except along nearby drainages. Site has a lot of surface rock that lends stability to the site.	0	0	10
Hydrologic		0	0	11
Biotic	The site has transitioned to a threeawn / tridens grassland, but black grama is still well represented. Catclaw and snakeweed are increasing but are not dominant on the site.	0	0	13

Site Notes: Soils are relatively stable. There is a lot of surface rock lending stability to the site. Some erosion is occurring along the nearby drainage and is associated with the road leading to this site. There are washed out places along the road. Species diversity is relatively good. Black grama is still well represented in the composition. There appears to be an increase in catclaw and snakeweed over what is expected for the site. Mesquite is common along the drainages. Musk thistle has infested the road sides of many of the roads leading to the site.

Plants encountered included:

shrubs: PRGL, ACGR (catclaw), GUSA, GUMI, DAFO, NOLINA, OPUNT (prickly pear),

eagleclaw cactus, pencil cholla, rainbow hedgehog, RHMI forbs: verbena, Zinnia spp., ERIOG, croton, Polygala alba, Krameria spp. grasses: BOER, BOGR2, SCBR, TRMU, TRPI, SPCR, PAHA, ERPU, ARIST, ARPU, STCO

## RFOs Upland and Biotic Standard Assessment Summary Worksheet

### SITE 64033-DRAW-E152

Legal Land Desc	NENE 19 0090S 0230E Meridian 23	Acreage	1350
Ecosite	070BY075NM SHALLOW CP-2	Photo Taken	Y
Watershed	13060008130 BERRENDO		
Observers	BRITTON; DILLEY	Observation Date	05/22/2007
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	CRB	Soil Taxon Name	CONGER
Texture Class	NM644 L	Soil Phase	CONGER- REAGAN
Texture Modifier	NM644 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.55	NOAA Growing Season Precipitation	8.18
NOAA Avg Annual Precipitation	9.73	NOAA Avg Growing Season Precipitation	8.01
Disturbances and Animal Use:	No grazing use in the vicinity of the study plot. An old road passes through the site, but in a loamy area, and is eroded.		

## Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					
Comments:	No rills on this site, but rills occur on the adjacent loamy areas near the drainage bottom and mostly associated with the road.					
S H	Water Flow Patterns				X	
Comments:	Flow patterns on this upland area are short and stable. Flow patterns in the adjacent loamy, bottom areas are more defined.					

S H	Pedestals and/or Terracettes					X
Comments:	Very minimal on this Shallow site, but more prevalent on the adjacent loamy site.					
S H	Bare Ground					X
Comments:	Much less than expected on this Shallow site. There is lots of surface cobble.					
S H	Gullies				X	
Comments:	None on this Shallow site, but gullies are forming on the adjacent loamy areas in association with the access road.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:	Very little movement on this Shallow site. Litter displacement is more evident on the adjacent loamy areas.					
S H B	Soil Surface Resistance to Erosion					
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:	Good aggregate stability on this Shallow site, but less so on the adjacent loamy site.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	Herbaceous ground cover is as expected on this Shallow site. There is an increase in shrubs (mostly ACGR) that could be affecting runoff and infiltration. The adjacent loamy site would rate moderate to extreme in this category.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups				X	
Comments:	There has been a shift in grass composition. Tridens and threeawns are the dominant grasses. BOER is still well represented. Shrubs (GUSA and ACGR) are increasing and are higher than expected. The adjacent loamy site would likely rate moderate to extreme or extreme. Mesquite dominates much of this area and burro grass is the dominant grass.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount				X	
Comments:	Within expected range. Estimated to be about 10%.					
B	Annual Production					X
Comments:	Annual production on this Shallow site is good and is >80% of potential.					

B	Invasive Plants			X		
Comments:	ACGR has increased beyond the site expectations. There is widely scattered mesquite on this Shallow site. Mesquite is common to dominant on the adjacent loamy site. Creosote bush is encroaching on the loamy site.					
B	Reproductive Capability of Perennial Plants					X
Comments:	On this Shallow site, desirable grasses produced seed in 2006. This is not true for the adjacent loamy site where grazing pressures have all but eliminated desirable forage plants.					
S	Physical/Chemical/Biological Crusts				X	
Comments:	On this Shallow site, crusts are evident throughout but are discontinuous. On the adjacent loamy site, biotic crusts are mostly absent.					
B	Wildlife Habitat				X	
Comments:	This area remains satisfactory habitat for mule deer. It has too much topographic relief to be antelope habitat.					
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:	N/A					
B	Special Status Species Populations					X
Comments:	N/A					

### Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	3	5
H	Hydrologic	0	0	0	5	4
B	Biotic	0	0	1	4	7

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate

box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil	This rationale is strictly for the Shallow site. Soils are relatively stable. There is a lot of surface rock that lends stability to the site.	0	0	8
Hydrologic		0	0	9
Biotic	This rationale is strictly for the Shallow site. Production is good. Species diversity is good, but the area is now dominated by threeawns and tridens. Black grama is still well represented. There is an increase in catclaw acacia and snakeweed. Mesquite is encroaching.	0	1	11

Site Notes: Soils are relatively stable on this Shallow site. There is a lot of surface rock that lends stability to the site. Production is good. The area has relatively good species diversity, but there has been a shift in grass composition. Threeawns and tridens are the dominant grasses. Black grama is still well represented in the composition. There is an increase in catclaw acacia and snakeweed over what is expected for this site. Mesquite are invading the site.

The adjacent bottom, loamy area is quite different and has several areas of significant departure from expected conditions. Rills and gullies are forming, mostly in association with an old road. Mesquite has invaded and is common to dominant throughout the drainage areas. Burro grass is the dominant grass. This area appears degraded.

Plants encountered included: shrubs: ACGR, GUSA2, RHMI, PRGL, pencil cholla, prickly pear, cholla forbs: croton, suncups, Gilia spp., Cryptantha spp. grasses: BOER, BOGR2, ARIST, SCBR, BOCU, STCO, HIMU

## RFOs Upland and Biotic Standard Assessment Summary Worksheet

### SITE 64033-WEST-E154

Legal Land Desc	NESW 24 0090S 0220E Meridian 23	Acreage	1937
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060008130 BERRENDO		
Observers	BRITTON; DILLEY	Observation Date	05/22/2007
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad	
Soil Map Unit	URB	Soil Taxon Name	UPTON
Texture Class	NM644 GR-L	Soil Phase	UPTON-

			REAKOR
Texture Modifier	NM644		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.55	NOAA Growing Season Precipitation	8.18
NOAA Avg Annual Precipitation	9.73	NOAA Avg Growing Season Precipitation	8.01
Disturbances and Animal Use:	No livestock in the vicinity. No use observed. An old road passes through the site.		

## Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:	No rills. Very rocky.					
S H	Water Flow Patterns				X	
Comments:	Flow patterns are short and stable. They are more notable in drainage areas.					
S H	Pedestals and/or Terracettes					X
Comments:	Very rare. Site is stable.					
S H	Bare Ground					X
Comments:	Well below expected. Lots of surface rock, cobble, gravel.					
S H	Gullies				X	
Comments:	Slight gully formation in drainages related to old road.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:	Litter is evenly distributed. Less so near drainage areas.					
S H B	Soil Surface Resistance to Erosion					X
Comments:	Soil aggregate stability was moderate, but the amount of surface rock lends stability to the site. There is very little pedestalling.					
S H B	Soil Surface Loss or Degradation					X
Comments:	There appears to be very little soil loss. The drainage bottom with the road is the					

	exception.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:	Shrubs (ie mesquite) are increasing but not to the point that runoff and infiltration is affected.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Shrubs (mesquite, catclaw, snakeweed) are becoming more abundant. Tobosa grass is associated with the loamy bottom area, not this shallow site. Tridens and threeawns are becoming the dominant grasses. Black grama is still well represented in the composition.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Slightly higher than expected.					
B	Annual Production					X
Comments:	>80% of potential. Good late summer rains in 2006.					
B	Invasive Plants			X		
Comments:	Trending toward moderate to extreme. Mesquite is scattered throughout the site and could be regarded as common in places. Cholla is widely scattered throughout. GUSA is more abundant than expected. Prickly pear appears to be increasing.					
B	Reproductive Capability of Perennial Plants					X
Comments:	Desireable grasses produced seed in 2006.					
S	Physical/Chemical/Biological Crusts				X	
Comments:	Evident throughout, but not continuous.					
B	Wildlife Habitat					X
Comments:	Satisfactory for mule deer.					
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:	N/A					
B	Special Status Species Populations					X
Comments:	N/A					

### Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	3	7
H	Hydrologic	0	0	0	2	9
B	Biotic	0	0	2	1	10

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil	Soils are very stable on this Shallow CP-2. There is very little evidence of erosion. Soils are less stable on the adjacent loamy area with the drainage.	0	0	10
Hydrologic		0	0	11
Biotic	Production is high. Species diversity is good. The area is transitioning to a grass/shrub mix. Shrubs are increasing. Mesquite is invading. Tridens and threeawns are becoming the dominant grasses. Black grama is still well represented.	0	2	11

Site Notes: Soils on this Shallow CP-2 site are very stable with little evidence of erosion. The adjacent drainage area (loamy) is less stable and has evidence of rill and gully formation in association with an old road. Production was good. Species diversity is relatively good, but the area is transitioning to a grass/shrub mix. Tridens and threeawns are becoming the dominant grasses. Black grama is still well represented in the composition. Shrubs are increasing including mesquite, catclaw acacia, snakeweed, prickly pear. Consequently, invasive plants and F/S groups rated moderate.

Plants encountered included: shrubs: PRGL, RHMI, NOLINA, prickly pear, cholla, ACGR, MIAC, GUSA2, bricklebush, DAFO grasses: BOER, BOGR2, ARDI, ARIST, TRMU, TRPI, LEDU, BOCU, HIMU

# **Determination of Public Land (Rangeland) Health for 64033 BARN DRAW**

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within Barn Draw allotment #64033, meets the (1) Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are some concerns with the loamy draws where erosion and invasive plants appear to be increasing. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ EDDIE BATESON  
Assistant Field Manager

08/24/2007  
Date